

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: G. HARDING
Title: X-Ray Emitter, Liquid-Metal Anode for an X-Ray Source and Method for Operating a
Magnetohydrodynamic Pump for the Same
Serial No.: 10/599,042
Art Unit: Not available
Filing Date: September 18, 2006
Examiner: Not available
Date: October 23, 2006

INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

The following are submitted in the above application in compliance with 37 CFR 1.97 and 37 CFR 1.98.

- ☒ 1. A list of documents on Form PTO-1449 or Substitute together with copies of each identified document (other than U.S. patents and U.S. patent application publications unless required by the Office) and a translation thereof or a concise explanation of each non-English language document or a Search Report or communication from a non-US patent office or an International Search Report from an International Searching Authority for a patent application filed via the Patent Cooperation Treaty or document(s) cited in the application or the priority application.

This paper is submitted in accordance with:

- ☒ 2. 37 CFR 1.97(b): [within three months of national, non-CPA filing, prior to first Office Action, on the merits, or prior to first office action after filing an RCE]
- ☐ 3. 37 CFR 1.97(c): [before Final Office Action, Allowance, or other action closing prosecution, whichever is earlier]; and
- ☐ a. The required Certification made in item 5 below; or
- ☐ b. The \$180.00 fee specified in 37 CFR 1.17(p) for submission of this Information Disclosure Statement is authorized in item 6 below.
- ☐ 4. 37 CFR 1.97(d): [on or before issue fee payment]; and
- a) The required Certification is stated in item 5 below; and
- b) The \$180.00 fee specified in 37 C.F.R. 1.17(p) for submission of this Information Disclosure Statement is authorized in item 6 below.

[] 5. Certification

- [] a. Each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of this Statement; or
- [] b. No item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application and, to the knowledge of the person signing this document after making reasonable inquiry, no item of information contained in this Statement was known to any individual designated in 37 CFR 1.56(c) more than three (3) months prior to the filing date of this Statement.

[X] 6. Payment of all applicable fees:

- ☒ Please charge all applicable fees associated with the submittal of this Information Disclosure Statement to Deposit Account No. 090470.
- ☐ Enclosed is a check in the amount of \$_____ in payment of all applicable fees associated with the submittal of this Information Disclosure Statement.

This document is submitted in duplicate.

Respectfully submitted,

/mac39148/
Mark A. Conklin
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Patent Counsel

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Wilton, CT 06897-4122

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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

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|------------------------|--------------------|
| Application Number | 10/599,042 |
| Filing Date | September 18, 2006 |
| First Named Inventor | G. HARDING |
| Art Unit | Not available |
| Examiner Name | Not available |
| Attorney Docket Number | 11HP201652 |

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U. S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------------|-----------------------|---------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------|---------------------------------------------------------------------------|----------------|
| Examiner Initials ⁴ | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | T ⁶ |
| | | Country Code ³ Number ⁴ Kind Code ⁵ (if known) | | | | |
| | | GB2317506A | 03-25-1998 | Aea Technology PLC | | |
| | | WO 98/16001A | 04-16-1998 | The Broken Hill Pr. et al | | |
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| Examiner Signature | | Date Considered | |
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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known**Application Number** 10/599,042**Filing Date** September 18, 2006**First Named Inventor** G. HARDING**Art Unit** not available**Examiner Name** not available**Attorney Docket Number** 11HP201652

Sheet

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NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|-----------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| | | HARDING G ET AL: "Liquid metal anode X-ray tubes and their potential for high continuous power operation" RADIATION PHYSICS AND CHEMISTRY, ELSEVIER SCIENCE PUBLISHERS B.V., AMSTERDAM, NL, Bd.67, Nr.1(2003-05), Seiten 7-14 | |
| | | HARDING G ET AL: "Liquid metal anode X-ray sources and their potential applications" NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH, SECTION-B: BEAM INTERACTIONS WITH MATERIALS AND ATOMS, ELSEVIER, AMSTERDAM, NL, Bd.213, (2004-01), Seiten 189-196 | |
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| Examiner Signature | | Date Considered | |
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

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3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.